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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/669,033 | 09/23/2003 | Robert J. Higgins | CM06376J | 1815 |

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EXAMINER

SANTIAGO CORDERO, MARIVELISSE

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--------------------------------|--|
| Office Action Summary | Application No. 10/669,033 | Applicant(s) HIGGINS ET AL. | |
| | Examiner Marivelisse Santiago-Cordero | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,10,12,13,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10,12,13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/28/06 has been entered.

3. Accordingly, claims 1-8, 10, 12-13, and 15-16 are pending.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8, 10, 12-13, and 15-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 15, the limitation "each audio accessory" is unclear because the term "each" suggests that there exists more than one audio accessory; however, the claim previously

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stated only one audio accessory (see e.g., the preamble and line 2). Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Wong et al. (hereinafter “Wong”; cited in form PTO-892, paper no. 20050617).

Regarding claim 8, Wong discloses an audio accessory optimization system (Abstract), comprising: an audio accessory (Fig. 1, reference numerals 120 and 130; col. 2, lines 28-34) having content information stored therein (Fig. 3, reference numerals 302-314), the audio accessory being controllerless (Fig. 2, reference 120), the content information for conveying information pertaining to the accessory's audio characteristics (Fig. 3, reference numerals 302-314), the accessory for coupling to one of a plurality of radios (Figs. 1-2, reference numeral 110; note that a plurality of radios is inherently present since it would be unwise to limit the use of an audio accessory to just one radio) wherein each of the plurality of radios includes a controller (Fig. 2, reference 204) that detects the content information and optimizes the audio of the accessory in response thereto (col. 4, lines 24-53), wherein the content information includes at least one of: audio interface type, number of audio modes and signaling configuration, duplex capability, receive audio parameters, transmit audio parameters, and receiver to transmitter transducer coupling parameters (Fig. 3 and col. 3, lines 21-47).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-8, 10, 12-13, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtiss et al. (hereinafter "Curtiss"; cited in form PTO-892; paper no. 20050617) in view of Voltz (cited in form PTO-892, paper no. 20050617).

Regarding claim 1, Curtiss discloses an audio accessory optimization system, comprising: a radio (Fig. 1, reference 104; paragraph [0032]) having a controller (Fig. 2, reference 216); and an audio accessory coupled to the radio (Fig. 1, reference 112; paragraph [0032]), the audio accessory including an embedded memory (Fig. 1, reference 120, paragraph [0034]) coupled to the radio controller (Figs. 1-2; paragraph [0033], last sentence; paragraph [0039]), the embedded memory containing audio optimization parameters to enable the radio to optimize the accessory audio performance (paragraph [0034]), wherein the audio optimization parameters include at least one of: audio interface type, number of audio modes and signaling configuration, duplex capability, and receiver to transmitter transducer coupling parameters (paragraphs [0034], [0043]-[0044], and [0050]).

Curtiss fails to disclose the audio accessory being controllerless.

However, in the same field of endeavor, Voltz discloses an audio accessory optimization system (col. 7, lines 26-48), comprising: a radio (Fig. 2, reference numeral 100; Fig. 5, reference numeral 300; col. 2, lines 63-64; note the stereo) having a controller (Fig. 2, reference 106); and an audio accessory coupled to the radio (Fig. 5, reference numerals 302, 304, and/or 306), the audio accessory being controllerless (Figs. 2-3, and 5), the audio accessory including an embedded memory (Fig. 5, reference numeral 122) coupled to the radio controller (Figs. 2-3), the embedded memory containing information to enable the radio to optimize the accessory audio performance (col. 7, lines 1-13 and 26-48).

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to modify the audio accessory of Curtiss to be controllerless as suggested by Voltz because it would be cheaper, simpler, and easier to manufacture.

Regarding claim 2, in the obvious combination, Curtiss discloses wherein the radio is a portable radio (paragraph [0032]).

Regarding claim 3, in the obvious combination, Curtiss discloses wherein the radio is a mobile radio (paragraph [0032]).

Regarding claim 4, in the obvious combination, Curtiss discloses wherein the information contained in the embedded memory is organized in a hierarchical fashion (Fig. 7).

Regarding claim 5, in the obvious combination, Curtiss discloses wherein the information contained in the embedded memory is used to create an encrypted digital signature that is also stored in the embedded memory (paragraphs [0066] and [0068]).

Regarding claim 6, in the obvious combination, Curtiss discloses wherein the embedded memory uses a single wire bus data communication means (paragraph [0041]).

Regarding claim 7, Curtiss discloses wherein the single wire bus data communication means comprises a 1-Wire[®] bus (paragraph [0041]).

Regarding claim 8, Curtiss discloses an audio accessory optimization system, comprising: an audio accessory having content information stored therein (Fig. 1, reference numerals 112 and 120; paragraph [0034]), the content information for conveying information pertaining to the accessory's audio characteristics (paragraphs [0034], [0043]-[0044], and [0050]), the accessory for coupling to one of a plurality of radios (paragraph [0032]) wherein each of the plurality of radios includes a controller (Fig. 2, reference 216) that detects the content information and optimizes the audio of the accessory in response thereto (paragraphs [0053]-[0055] and [0061]-[0062]), wherein the content information includes at least one of: audio interface type, number of audio modes and signaling configuration, duplex capability, receive audio parameters, transmit

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audio parameters, and receiver to transmitter transducer coupling parameters (paragraphs [0034], [0043]-[0044], and [0050]).

Curtiss fails to disclose the audio accessory being controllerless.

However, in the same field of endeavor, Voltz discloses an audio accessory optimization system (col. 7, lines 26-48), comprising: an audio accessory coupled to the radio (Fig. 5, reference numerals 302, 304, and/or 306) having content information stored therein (col. 7, lines 1-13 and 26-48), the audio accessory being controllerless (Figs. 2-3, and 5), the content information for conveying information pertaining to the accessory's audio characteristics therein (col. 7, lines 1-13 and 26-48), the accessory for coupling to one of a plurality of radios (col. 2, lines 63-64) wherein each of the plurality of radios includes a controller (Fig. 2, reference 216) that detects the content information and optimizes the audio of the accessory in response thereto (col. 4, lines 12-15; col. 7, lines 1-13 and 26-48)

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to modify the audio accessory of Curtiss to be controllerless as suggested by Voltz because it would be cheaper, simpler, and easier to manufacture.

Regarding claim 10, in the obvious combination, Curtiss discloses wherein the receive audio parameters include at least one of: power amplifier mode, line mode, transducer load impedance, maximum output level, effective sound pressure level (SPL), and cone envelope parameters (paragraphs [0034], [0043]-[0044], and [0050]).

Regarding claim 12, in the obvious combination, Curtiss discloses wherein the transmit audio parameters includes at least one of: minimum microphone bias voltage, maximum

microphone bias voltage, microphone electrical model parameters, microphone sensitivity, and microphone acoustic model (paragraphs [0034], [0043]-[0044]).

Regarding claim 13, in the obvious combination, Curtiss discloses wherein the microphone acoustic model includes at least one of: sensor type and response variation with distance (paragraphs [0034], [0043]-[0044]).

Regarding claim 15, Curtiss discloses an audio accessory (Fig. 1, reference 112), comprising: audio optimization parameters stored in the audio accessory (paragraphs [0034], [0043]-[0044], and [0050]); and the audio accessory for coupling to a variety of different radios (paragraph [0032]), each radio having a controller (Fig. 2, reference 216) and each audio accessory having different audio characteristics (paragraphs [0034] and [0037]), the audio accessory being automatically adjusted by each radio controller based on the audio parameters stored in the audio accessory (paragraphs [0042], [0053]-[0055] and [0061]-[0062]), wherein the audio optimization parameters include at least one of: audio interface type, number of audio modes and signaling configuration, duplex capability, and receiver to transmitter transducer coupling parameters (paragraphs [0034], [0043]-[0044], and [0050]).

Curtiss fails to disclose the audio accessory being controllerless.

However, in the same field of endeavor, Voltz discloses an audio accessory comprising: audio optimization parameters stored in the audio accessory (col. 7, lines 1-13 and 26-48), the audio accessory being controllerless (Figs. 2-3 and 5).

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to modify the audio accessory of Curtiss to be controllerless as suggested by Voltz because it would be cheaper, simpler, and easier to manufacture.

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Regarding claim 16, in the obvious combination, Curtiss discloses wherein the audio accessory includes a memory device containing a plurality of descriptors that provide hierarchical information to enable radio optimization of the audio accessory audio performance (Fig. 7).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSC 4/12/06

MSC



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